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The Keck Interferometer - Progress Report

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The Keck Interferometer is a NASA-funded joint development between JPL and the W. M. Keck Observatory. The interferometer will combine the two 10-m Keck telescopes with four 1.8-m outrigger telescopes in several observing modes. These include: nulling interferometry at 10 um to measure the quantity of exozodiacal emission around nearby stars; near-infrared differential-phase measurements to detect "hot Jupiters" by their direct emission; narrow-angle astrometry to search for exoplanets by their astrometric signature; and near-infrared imaging to address a variety of imaging science. Active development of the instrument subsystems and associated infrastructure is underway at both JPL and CARA, and current progress and plans will be reported.